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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/668,491

09/23/2003

Mark Gary Weinberg

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08/22/2006

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
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4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

FEELY, MICHAEL J

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,491

Applicant(s)

WEINBERG ET AL.

Examiner

Michael J. Feely

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 1-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. The election of species requirement has been withdrawn. The restriction requirement stands and is final.

Pending Claims

2. Claims 1-49 are pending, of which claims 1-28 are withdrawn from consideration

Previous Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. The rejection of claims 29-33, 36-38, and 45-49 under 35 U.S.C. 103(a) as being unpatentable over Shin et al (US Pat. No. 6,458,304) in view of Haszeldine et al. (US Pat. No. 3,917,725) has been overcome with a statement of common ownership (*see response filed June 14, 2006*).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 29-31 and 33-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The instant claims feature a *mixture* of a first and second polymer wherein: the concentration range of the first polymer is 0 to 95 wt%, and the concentration range of the

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second polymer is 5 to 100 wt%. It is unclear how this can be considered a *mixture* in the embodiment that features 0 wt% of the first polymer and 100 wt% of the second polymer. Both materials must be present to be considered a *mixture* of first and second polymers.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 30-32, 34, 36, 45, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Harpell et al. (US Pat. No. 4,584,347).

Regarding claims 30-32, 34, 36, 45, and 48, Harpell et al. disclose: **(30)** a spin mixture (Abstract; column 2, line 65 through column 3, line 2) comprising a spin agent (column 2, line 65 through column 3, line 2; column 6, lines 43-48) and a polymer mixture (column 2, line 65 through column 3, line 2), wherein the polymer mixture comprises 0 to 95% by weight of a first polymer (column 3, lines 41-54; claim 1) selected from the group consisting of polyolefins, copolymers thereof with ethylenically unsaturated monomers, polyesters, and mixtures thereof (column 2, line 65 through column 3, line 2); and 5 to 100% by weight of a second polymer (column 3, lines 41-54; claim 1) selected from the group consisting of polyolefins, copolymers thereof with ethylenically unsaturated monomers, polyesters, and mixtures thereof (column 2, line 65 through column 3, line 2), and the second polymer comprises 1 to 25 mol% of pendant functional groups (column 4, lines 29-39); **(31)** wherein the spin agent is selected from the group consisting of aliphatic hydrocarbons, fluorocarbons, halogenated hydrocarbons, and hydrofluorocarbons (column 6, lines 43-48); **(32)** wherein the polymer mixture comprises 70 to 95 percent by weight of the first polymer and 30 to 5 percent of the second polymer (column 3, lines 41-54; claim 1); **(34)** wherein the first polymer is polyethylene (column 2, line 65 through column 3, line 2); **(36)** wherein the second polymer is polyethylene (column 4, lines 29-39); **(45)** wherein the second polymer comprises 5 to 15 mol% of pendant functional groups (column 4, lines 29-39); and **(48)** formed as a non-woven fabric (column 7, lines 59-68).

9. Claims 30, 32, 33, 36, 45, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Tabor et al. (US Pat. No. 5,372,885).

Regarding claims 30, 32, 33, 36, 45, and 48, Tabor et al. disclose: **(30)** a spin mixture (Abstract; column 6, lines 56-68) comprising a spin agent (column 6, lines 56-68) and a polymer mixture (Abstract; column 6, lines 56-68), wherein the polymer mixture comprises 0 to 95% by weight of a first polymer (Abstract; column 6, lines 56-68) selected from the group consisting of polyolefins, copolymers thereof with ethylenically unsaturated monomers, polyesters, and mixtures thereof (Abstract; column 6, lines 56-68); and 5 to 100% by weight of a second polymer (Abstract; column 6, lines 56-68) selected from the group consisting of polyolefins, copolymers thereof with ethylenically unsaturated monomers, polyesters, and mixtures thereof (Abstract; column 6, lines 56-68), and the second polymer comprises 1 to 25 mol% of pendant functional groups (column 6, lines 32-45); **(32)** wherein the polymer mixture comprises 70 to 95 percent by weight of the first polymer and 30 to 5 percent of the second polymer (Abstract; column 6, lines 56-68); **(33)** wherein the first polymer is polyethylene terephthalate (Abstract; column 6, lines 56-68); **(36)** wherein the second polymer is polyethylene (Abstract; column 6, lines 56-68); **(45)** wherein the second polymer comprises 5 to 15 mol% of pendant functional groups (column 6, lines 32-45); and **(48)** formed as a non-woven fabric (column 8, lines 42-53).

10. Claims 30, 32, 34, 36, 45, 46, 48, and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakagawa et al. (US Pat. No. 6,338,772).

Regarding claims 30, 32, 34, 36, 45, 46, 48, and 49, Nakagawa et al. disclose: **(30)** a spin mixture (Abstract; column 7, lines 14-25) comprising a spin agent (column 7, lines 14-25) and a polymer mixture (Abstract), wherein the polymer mixture comprises 0 to 95% by weight of a first polymer (column 5, lines 13-18) selected from the group consisting of polyolefins,

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copolymers thereof with ethylenically unsaturated monomers, polyesters, and mixtures thereof (Abstract); and 5 to 100% by weight of a second polymer (column 5, lines 13-18) selected from the group consisting of polyolefins, copolymers thereof with ethylenically unsaturated monomers, polyesters, and mixtures thereof (Abstract), and the second polymer comprises 1 to 25 mol% of pendant functional groups (column 4, lines 21-30); **(32)** wherein the polymer mixture comprises 70 to 95 percent by weight of the first polymer and 30 to 5 percent of the second polymer (column 5, lines 13-18); **(34)** wherein the first polymer is polyethylene (Abstract); **(36)** wherein the second polymer is polyethylene (Abstract); **(45)** wherein the second polymer comprises 5 to 15 mol% of pendant functional groups (column 4, lines 21-30); **(46)** formed as a plexi-filamentary yarn (column 7, lines 14-25); and **(48 & 49)** formed as a non-woven fabric (column 7, line 52 through column 8, line 34).

Allowable Subject Matter

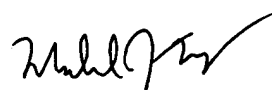
11. Claim 29 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
12. Claims 35, 37-44, and 47 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael J. Feely
Primary Examiner
Art Unit 1712

August 19, 2006

**MICHAEL FEELY
PRIMARY EXAMINER**